



FINAL DECISION NOTICE AND FINDING OF NO SIGNIFICANT IMPACT FIGHTINGTOWN CREEK EARLY-SUCCESSIONAL HABITAT PROJECT

U.S. FOREST SERVICE CHATTAHOOCHEE-OCONEE NATIONAL FORESTS CONASAUGA RANGER DISTRICT FANNIN AND GILMER COUNTIES, GEORGIA

DECISION

Based upon my review of the Fightingtown Creek Early-Successional Habitat Project Environmental Assessment (EA), I have decided to implement Alternative 3 as described on pages 10-13 of the EA, with some minor modifications. My decision includes the following changes to Alternative 3:

- (1) The partial canopy treatment on 54 acres in **Compartment 680 Stand 39** will be implemented using **non-commercial** methods only.
- (2) Road reconstruction and maintenance activities would not be implemented on FSR 796 (McClure Creek Road). Roadside daylighting and development of the road as a walk-in hunting area would still be implemented as described in the EA under Alternatives, beginning on page 10.

This adjustment will treat the same number of acres, but the commercial timber harvest acreage will be reduced by 54 acres. This will reduce the need for minor reconstruction and road maintenance on 1.3 miles of road and decrease acres of predicted soil disturbance by approximately 5.5 acres, while still allowing for the purpose and need for the project to be achieved.

Project design criteria (EA, pages 14-15); visual standards (EA, Appendix B) and the monitoring plan (EA, Appendix D) are included in this

decision and are attached as Appendix 1 to this decision document.

The EA documenting the site-specific environmental analysis for the Fightingtown Creek Project is available for public review at the Conasauga Ranger District in Chatsworth, GA or online at http://www.fs.usda.gov/project/?project=44961.

In summary, this decision authorizes the following actions:

Vegetation management

- 105 acres of commercial timber harvest using an even-aged regeneration method, retaining an average of 15 ft² of residual basal area per acre;
- 144 acres of commercial timber harvest using a partial canopy retention method, reserving 25% in full retention aggregates of ½ acre to 1 acre;
- 91 acres of commercial timber harvest using a two-aged shelterwood method, retaining an average of 25-40ft² of residual basal area per acre (favoring oaks and other long-lived species);
- 54 acres of non-commercial treatment (manual slashdown/mastication/girdling) to create young forest habitat using a partial canopy retention method,
- Timber stand improvement (manual slashdown of sub-mechantable trees





following commercial harvest), and periodic manual treatments to individually release oaks and other desired species in the above areas.

Old growth conservation

 461 acres conserved as small blocks of old growth

Supporting Road Activities and Other Road Management

- Reduction in the maintenance level of Forest Service Road 797 (Hickory Nut) from a Level 3 to a Level 2 road.
- Road maintenance on 9.6 miles of Forest roads intended for hauling, including Forest Service Roads 792 (Williamson Cove), 797, and 798 (Porter Mountain);
- Minor reconstruction on segments of Forest roads intended for hauling, including Forest Service Roads 792, 797, and 798;
- Construction or re-opening/betterment of 3 miles of temporary access roads for timber management activities;
- Seasonal closure (January thru March) of the first 3.5 miles of FS Road 792; year-round closure (walk-in access only) of the last mile:
- Year-round closure (walk-in access only) of Forest Service Road 796 (McClure Creek);
- Removal of roadside overstory vegetation ("daylighting") along the year-round closed road segments of FS Roads 792 and 796, planting a preferred seed mixture for development as walk-in hunting areas, future maintenance of these areas by mowing, mastication, or replanting.

See the EA (page 10-13) for a detailed list of areas to be treated under this decision.

DECISION RATIONALE

Pages 1-3 of the EA fully describe the purpose and need for the Fightingtown Creek Project, which includes actions needed to provide a diversity of successional stage habitats, including early-successional stage habitats, to meet the needs of all successional communities; and to conserve small blocks of future old growth.

In addition to the primary purpose and need for action in Fightingtown Creek, there is an opportunity to implement selected actions identified in the Travel Analysis Process (TAP) and documented in the Forest's Travel Analysis Report (TAR). This report can be found on the Forest's website at:

https://www.fs.usda.gov/Internet/FSE_DOCUM ENTS/fseprd539037.pdf

My selection of Alternative 3 was based on a thorough review of the purpose and need for the Fightingtown Creek project. I also conducted a careful review of the effects analysis provided in the Environmental Consequences section of the EA for each alternative analyzed, as well as the public comments received during the comment periods. The Fightingtown Creek IDT conducted a thorough effects analysis of the proposed action and other alternatives. This included an analysis of the past, present, and reasonably foreseeable future actions that could be combined with the expected effects from the project. It is my determination that their analysis is sufficient to allow for an informed and reasoned decision. I believe the selected Alternative and the associated design criteria will meet the purpose and need for the Fightingtown Creek Project area, move the area towards the desired future condition, and address public concerns.

My rationale for selection of Alternative 3 is further detailed below:

<u>Diversity in Forest Habitats:</u> The Fightingtown Creek project area is dominated by late-





successional forests with lesser amounts of younger forests and little-to-no early-successional forest habitat (Table 14 of Final EA, pages 27-28). This situation is not consistent with Goal 2 of the Forest Plan, that in part states "[a] diversity of habitat will be provided for the full range of native and other desired species" and that "early successional habitat will be well distributed in all forest types, elevations, aspects, and slopes including riparian corridors."

Concern over certain elements of the action alternatives or their proposed locations was expressed by several respondents during the project's two comment periods. (A list of these concerns and the Forest Service's response to them may be found in the EA, Appendix C). I believe Alternative 3 addresses these concerns in an open and responsive manner. The selected Alternative (3) would improve the diversity of forest habitats in the project area, by creating 394 acres of early-successional forests; however, the proposal to do this includes various treatment methods which are designed to mitigate the loss of mature oaks and retain more canopy trees overall. I believe this will enhance structural diversity while still providing needed early-successional stage forest habitat.

Other Alternatives Considered

In addition to the Selected Alternative (Alternative 3), I considered two other alternatives in detail, Alternative 1 (No Action) and 2 (Proposed Action). A comparison of alternatives given detailed study can be found on pages 15-16 of the final EA.

Alternative 1 – No Action: With the No Action Alternative, timber harvest, old growth designation, and changes in road management would be deferred at this time. Existing trends would be expected to continue. However, ongoing Forest Service permitted and approved activities would continue in the Fightingtown Creek project area. Activities such as road

maintenance, NNIS treatments, fire suppression, hunting, fishing, and camping would continue to occur within the project area. Pages 16-17 of the EA displays ongoing and reasonably foreseeable future actions that would be expected to occur under this alternative.

I eliminated Alternative 1 from consideration because it would not meet the purpose and need for the project and resources would not be moved towards the Forest Plan's desired condition for the area. Forest habitat diversity would not be enhanced and no additional early-successional forest would be created. No small blocks of old growth would be conserved.

<u>Alternative 2 – Proposed Action:</u> The original proposal included 436 acres proposed for evenaged regeneration, with the purpose of increasing successional stage diversity in the area, as well as conserving old growth and changing road management on area roads. Although this alternative was designed to minimize loss of mature oaks by the selection of mesic deciduous stands for treatment, several interested citizens had concerns about specific stands, the method of treatment, and the potential loss of mast and other habitat components. I believe that although less earlysuccessional habitat would be created by Alternative 3 (about 10% less), it still meets the purpose and need for action while responding to these concerns.

PUBLIC INVOLVEMENT

The Fightingtown Creek Early-Successional Habitat Project was added to the Schedule of Proposed Actions (SOPA) beginning in July of 2015. A scoping notice detailing the proposed action and seeking input was sent to interested individuals and groups on August 17, 2015. The scoping package was also posted to the Forest's website on the same date. The scoping comment period was open for 30 days through





September 16, 2015. The agency received 265 letters or emails during the 30-day scoping period. On July 28, 2016, the district hosted a field tour of some of the proposed treatment areas. Alternative 3 was developed in part in response to the scoping comments as well as input received during the field trip.

A notice regarding the availability of a draft Environmental Assessment (EA) was sent to the district's mailing list on December 21, 2016. The draft EA was published on the Forest's website on December 19, 2016.

A legal notice requesting comments on the draft EA was also published in *The Daily Citizen* (Dalton, GA), the newspaper of record for the Conasauga Ranger District, on December 27, 2016. A 30-day comment period for submitting comments began the day following this publication per 36 CFR 218.24(b)(6). The district accepted comments during the 30-day comment period through January 26, 2017.

Nine (9) respondents submitted comments during the 30-day comment period for the draft EA. (Three (3) respondents submitted comments after the 30-day period). The IDT and Responsible Official reviewed all comments submitted. A table documenting comments received during the 30-day comment period for the draft EA and the agency's response to comments submitted may be found in Appendix C of the Final EA. A summary of comments received during the scoping period is also in Appendix C.

The final EA was released on September 18, 2017.

FINDINGS REQUIRED BY OTHER LAWS AND REGULATIONS

This decision is consistent with the Chattahoochee-Oconee National Forests Land

Management Plan. It is consistent with the Forest Goals and Objectives listed in the Purpose and Need for the project (see EA, pages 1-3). The project was designed to conform to Forest Plan standards and incorporates them in the implementation (EA pages 14-15; EA Appendix B). A monitoring plan is in place to ensure compliance with the Forest Plan during implementation of the project (EA Appendix D).

A Finding of No Significant Impact (FONSI) and EA were considered. I determined these actions will not have a significant effect on the quality of the human environment, and an Environmental Impact Statement (EIS) will not be prepared.

Alternative 3 does not threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment. Alternative 3 would be consistent with the following applicable laws and Executive Orders:

American Indian Religious Freedom Act of 1978

Antiquities Act of 1906 (16 USC 431433)

Archaeological and Historical Conservation Act of 1974 (16 USC 469)

Archaeological Resource Protection Act of 1979 (16 USC 470)

Cave Resource Protection Act of 1988

Clean Air Act of 1977 (as amended)

Clean Water Act of 1977 (as amended)

Endangered Species Act (ESA) of 1973 (as amended)

Forest and Rangeland Renewable Resources Planning Act (RPA) of 1974 (as amended)

Historic Sites Act of 1935 (16 USC 461467)

Multiple Use Sustained Yield Act of 1960





National Environmental Policy Act of 1969, (as amended) (42 USC 43214347)

National Forest Management Act (NFMA) of 1976 (as amended)

National Historic Preservation Act of 1966 (16 USC 470)

Organic Act 1897

Prime Farmland Protection Act

Wild and Scenic Rivers Act of 1968, as amended 1986

Forest Service Manuals such as 2361, 2520, 2670, 2620, 2760

Executive Order 11593 (cultural resources)

Executive Order 11988 (floodplains)

Executive Order 11990 (wetlands)

Executive Order 12898 (environmental justice)

Executive Order 12962 (aquatic systems and recreational fisheries)

Executive Order 13112 (NNIS)

ADMINISTRATIVE REVIEW OR OBJECTION OPPORTUNITIES

This project was subject to the pre-decisional objection process pursuant to 36 CFR 218 Subpart A and B and a legal notice of opportunity to object was published on September 18, 2017 in *The Daily Citizen* (Dalton, GA) and sent to those who provided comment s during the project's development. One objection was filed and processed during the 45-day objection period by the objection reviewing officer.

IMPLEMENTATION DATE

Implementation of this decision may occur immediately.

FINDING OF NO SIGNIFICANT IMPACT

The significance of environmental impacts must be considered in terms of context and intensity. This means that the significance of an action must be analyzed in several contexts such as society as a whole (human and national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. In the case of a site-specific action, significance usually depends upon the effects in the locale rather than in the world as a whole. Intensity refers to the severity or degree of impact. (40 CFR 1508.27)

CONTEXT

The physical, biological and social effects are limited to the analysis area and the immediate adjacent environs, which are disclosed in the Environmental Consequences section of the EA (pages 16-67).

INTENSITY

The intensity of effects was considered in terms of the following:

- 1. Both beneficial and adverse effects have been considered. Impacts associated with the project are discussed throughout the EA. These impacts are within the range of those identified in the Forest Plan. My finding of no significant environmental effects is not biased by the beneficial effects of the action.
- 2. The selected alternative will not result in significant effects on public health and safety. No actions are proposed which may impact public health or safety.
- 3. There will be no significant effects on unique characteristics of the geographic area such as park lands, historical and cultural resources, prime farmlands, wetlands, floodplains, wild and scenic rivers, or ecologically critical areas. Project Design Features (EA pages 14-15) for the Selected Alternative will be





- implemented to protect cultural resources existing in the project area.
- 4. The effects on the quality of the human environment are not likely to be highly controversial. There is no known credible scientific controversy over the impacts of the proposed action. The Environmental Consequences section of the EA provides the scientific and analytical basis for the determination of effects to the physical, biological and social environments. Reference information is provided on pages 68-73 of the EA. A review of the EA and the project record indicates that the best available scientific information was used to inform the environmental analysis. The effects associated with this type of action are well understood and documented in scientific literature referenced in this EA and the Forest Plan FEIS.
- 5. We have considerable experience with the types of activities to be implemented. The effects analysis shows the effects are not uncertain, and do not involve unique or unknown risk (EA, Environmental Consequences section).
- 6. The actions in this decision are not likely to establish a precedent for future actions with significant effects, because they do not represent a decision in principle about future proposals. Future decisions will require review under the National Environmental Policy Act, including public notification.
- 7. The cumulative impacts are not significant. The EA includes all connected, cumulative, and similar actions in the scope of the analysis. The cumulative effects of past, present and reasonably foreseeable actions are considered and disclosed in the EA in each resource section.

- 8. The location of cultural resource sites in the project area were identified using historic survey records and field surveys of areas where information was unavailable. All sites identified and determined to be eligible will be protected during implementation through avoidance.
 - The action will have no significant adverse effect on districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, nor cause loss or destruction of significant scientific, cultural, or historical resources because sites will be protected during implementation of the Selected Alternative (See EA pages 6 and 14).
- 9. The EA (pages 33-34 and 54-57) identifies both potential adverse and beneficial effects to federally listed species. A Biological Assessment and Evaluation (BA/BE) addressing the effects of the proposed action was prepared by the ID team wildlife biologist. The BA/BE includes a finding that the project is not likely to adversely affect small-whorled pogonia (Isotria medeoloides), or impact Rafinesque's big-eared bat (Corynorhinus rafinesquii) or eastern small-footed bat (Myotis leibii). The project may affect individual broadleaf tickseed (Coreopsis latifolia) plants, but not affect population viability or lead to federal listing.

The BA/BE also includes a finding that the project "may affect, is likely to adversely affect" northern long-eared bat (Myotis septentrionalis) (NLEB) due to the possible loss of roost trees. The NLEB was recently federally listed as threatened with a 4(d) rule (allowing for exemptions to take prohibitions for





forest management and other activities in certain situations). The Forest Service, Region 8, has been formally consulting with the US Fish and Wildlife Service regarding activities on 15 National Forests and 1 National Recreation Area in Region 8. The Forest Service contended that the implementation of the various Forest Plans by National Forests in Region 8 may adversely affect the NLEB; however, the Forest Service is perpetuating forested habitat in the action area, and asserts that existing standards, guidelines, and best management practices in Forest Plans are likely to improve roosting and foraging habitat and minimize the incidental take of the species. The US Fish and Wildlife Service issued a programmatic Biological Opinion (FWS Log #04E00000-2015-F-0003) dated August 5, 2015, which concluded that the implementation of the Forest Plans is likely to adversely affect NLEB, but is not likely to jeopardize the continued existence of the species. Project-level activities (such as the actions proposed in the Fightingtown Creek project area) that are implemented consistent with the Biological Opinion and the 4(d) rule are exempt from further consultation with the US Fish and Wildlife Service under 50 CFR 17.31 and 17.32. This information is further disclosed in the EA on page 55.

In addition, the BA/BE also includes a finding that the project "may affect, is likely to adversely affect" Indiana bat (Myotis sodalis) due to the possible loss of roost trees or snags. However, the Chattahoochee-Oconee National Forests recently amended the Forest Plan to include standards for the conservation of federally listed bats. The U.S. Fish and

Wildlife Service concurred with the Forest Service determination that the implementation of the new standards for bat conservation were not likely to jeopardize the continued existence of Indiana bat and issued a Biological Opinion (BO) and an Incidental Take statement for the species (USFWS 2017). This project is consistent with the Forest Plan, the description of the proposed action in the February 7, 2017 BO; therefore, the BO satisfies the Forest Service's responsibilities under ESA section 7(a)(2) relative to the Indiana bat for this project (EA pg 57).

I have considered the significance of these determinations in light of the National Environmental Policy Act. I have determined that impacts from this project are both beneficial and adverse and will not significantly affect the environment. This is based upon the US Fish and Wildlife Service's non-jeopardy Biological Opinion(s), the project's compliance with the ESA 4(d) rule, the protective measures existing in the Forest Plan, and project level design criteria which will reduce potential direct effects.

10. The action will not violate Federal, State, and local laws or requirements for the protection of the environment. Applicable laws and regulations were considered in the EA (EA pg 68). The action is consistent with the Forest plan (EA pages 2-3).

After considering the effects of the actions analyzed, in terms of context and intensity, I have determined that these actions will not have a significant effect on the quality of the human environment. Therefore, an environmental impact statement will not be prepared.





CONTACT

For additional information concerning this decision, contact: Nelson Gonzalez-Sullow, Forest Environmental Coordinator,

Chattahoochee-Oconee National Forests, 1755 Cleveland Highway, Gainesville, GA 30501, (706)-297-3051.

JEFF GARDNER

District Ranger

2/22/2018

Date

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Fightingtown Creek Project – DN and FONSI

APPENDIX 1.

ALTERNATIVE 3. STAND AND TREATMENT CROSSWALK TABLES.

TABLE 1. Stands to be treated by the partial canopy retention method

Compartment	Stand	Acres
680	14	26
680 ⁸	39	54
681	13	35
681	15	22
683	01	15
683	02	18
683	03	28
	Total	198 ^A

AThls figure represents total stand acres; approximately 25% of each stand would be retained.

Primary Treatment Activity – Commercial timber harvest using a partial canopy retention method, reserving 25% in full retention aggregates of ½ acre to 1 acre

Connected Treatment Activities – Manual slashdown of sub-merchantable stems for site preparation. TSI treatments 5 years after harvest (and as needed hereafter) to release oaks and other desired species (manual).

Table 2. Stands to be treated by the two-aged shelterwood method.

Compartment	Stand	Acres
680	22	25
681	18	56
681	17	10
Total	•	91

Primary Treatment Activity – Two-aged shelterwood harvest (retain 25-40 sq feet per acre)

BThis stand would be treated by NON-COMMERCIAL METHODS ONLY (manual slashdown, girdling, mastication).

Connected Treatment Activities – Manual slashdown of sub-merchantable stems for site preparation. TSI treatments 5 years after harvest (and as needed hereafter) to release oaks and other desired species (manual).

Table 3. Stands to be treated by even-aged regeneration harvest.

Compartment	Stand	Acres
680	05	20
680	08	33
680	09	13
680	13	16
682	21	11
683	10	12
Total	105	

Primary Treatment Activity – Even-aged regeneration harvest (retain 15 sq feet per acre)

Connected Treatment Activities – Manual slashdown of sub-merchantable stems for site preparation.

TSI treatments 5 years after harvest (and as needed hereafter) to release oaks and other desired species (manual).

Project Design Features

Resource	Design Feature				
	Temporary roads would be constructed on existing routes (old woods roads or skid trails) where possible to minimize the need for new temporary road construction.				
	Temporary roads would follow the general contour as practical and will generally not exceed sustained grades over 10%.				
Soil and Water	The travel way of temporary roads would generally not exceed 14-16 feet except at turnouts and landings.				
	Drainage structures, such as outsloping and waterbars, would be installed along temporary roads when the use of the road is no longer needed.				
	Once the temporary roads are no longer needed, they would be closed to normal vehicle traffic and so that illegal ATV use is discouraged. The closures may include such things as the installation of an earthen barrier, re-contouring, placement of logging debris along the road surface, or placement of boulders.				

Resource	Design Feature				
	Skid trails will be closed at their junction with landing sites by placing slash on the skid trail in order to discourage illegal ATV use.				
	Log landings and skid trail locations would be evaluated and approved by the Forest Service prior to harvesting in order to ensure that they are placed in locations with adequate drainage and away from sensitive soils or riparian areas.				
	Skidding and decking would be limited to designated and approved routes along ridges and gentle slopes to protect sensitive soils. Skidding would not be allowed on sustained slopes over 35%.				
	Operation of ground-based equipment would only be allowed when soils are dry. Soil moisture would be assessed during harvest operations to determine periods when equipment should be halted to minimize compaction and rutting.				
	Skid trails, log landings, temporary roads, or other areas of exposed soil, would be seeded and fertilized as soon as practical after harvest activities have been completed in order to restore vegetative cover and reduce the potential for erosion.				
	Water bars would be installed on skid trails and temporary roads at the completion of the project to minimize the potential for erosion.				
	Compacted soils on skid trails, temporary roads, and log landings would be ripped or tilled in areas of detrimental soil compaction to maintain soil quality standards and increase water infiltration.				
	Sensitive soils discovered during timber sale layout would be protected by restricting access or activities in these areas.				
	Skidding would not occur within riparian corridors, except for at designated crossings.				
Riparian Areas	Log landings and skid trails would not be placed within riparian corridors.				
	There will be a no-harvest zone within 25 feet of perennial and intermittent streams. A minimum of 50 ft ² per acre of residual basal area or at least 50% of canopy cover would be retained within the remaining 75 feet of the riparian corridor.				
Heritage Resources	Heritage resources subject to direct or indirect effects resulting from the activities associated with this project would be avoided and protected from project effects as needed.				
Tremage Resources	Heritage resource sites would have a minimum protective buffer of 100 feet. The buffer would be marked on the ground and excluded from project activities.				
	Significant infestations of NNIS along planned access routes would be pre-treated systematically within timber sale areas in order to prevent the spread of NNIS into new areas.				
Non-native Invasive Species (NNIS)	Equipment cleaning would be required in order to minimize the spread of NNIS and to minimize the potential to introduce new NNIS to the area.				
	Skidding through known populations of NNIS should be avoided, where possible, to reduce the potential for spread.				

Resource	Design Feature
	Even-aged regeneration harvests would be limited to 40 acres in size.
	Dogwoods will be retained in all timber harvest units.
Vegetation Management	Large scarlet oaks will be preferentially selected as residual trees in the shelterwood treatment in Comp 680 st 22).
	Shortleaf pines will be preferentially selected for retention in the partial canopy retention treatment in Comp 683 stands 01 and 02.
Rare plants	Known populations of TES/LR plants will be protected by placement of a buffer zone around them, depending on the specific requirements of each species. This buffer would be a minimum of 50 feet.
	Regeneration areas in or abutting deciduous or mixed forests must include a 50-foot zone along mature forest edges in which intensity of silvicultural treatment decreases, resulting in a transitional or feathered edge (FWS-007).
	Layout of regeneration areas would incorporate irregular-shaped boundary edges to minimize straight-edge effects and contrast between un-treated areas.
Visual Quality	Layout of regeneration areas would incorporate a no-harvest zone between unit boundaries and open Forest roads or private property (C682 St 1,2,3; 682 St 21; 684 St 31)
	Layout of regeneration areas by design would leave areas un-harvested along prominent ridge- lines and/or sites of higher elevation to reduce "sky-lighting" effects and to obscure areas of lower elevation in regeneration.
	Other measures to be applied to all alternatives to protect the visual quality of the Fightingtown project area are located in Appendix B of this EA.
	No cutting of snags >6 inches DBH.
	In all silvicultural treatments, retention priority is given to the largest available trees with favorable characteristics as bat roost trees (yellow pines and oaks with crevices, cracks, or hollows).
Wildlife Habitat	In even-aged regeneration, create 5 snags per acre if not present.
standards	In even-aged regeneration stands larger than 10 acres, maintain a minimum of 15 sq. feet of basal area. These can be arranged in clumps, corridors, or feathered edges.
	In stands over 10 acres treated as seed-tree or shelterwood with reserves, maintain a minimum of 20 sq. feet of basal area. Retain all trees within 20 feet of 5 snags per acre for windthrow protection and snag recruitment.
	All shagbark hickory trees would be retained.
	Protect known bat roosts from cutting or modification as long as suitable.

Monitoring Plan

Resource Assessed	Monitoring Question/Objecti ve	Frequency	Field Method/Data Collection	Documentatio n Format	Primary Responsibilit y
Soil Productivity & Water Quality	Are Best Management Practices (BMPs) being implemented through timber sale contract provisions, and according to Forest Plan standards?	During operational periods (timber sales, site prep, road construction and maintenance)	Evaluate implementation of Best Management Practices, timber sale contract provisions. All timber sale units are evaluated for implementation .	Field inspection forms, filed in Timber Sale Contracts, reviewed by FSR	District Timber Sale Administrator, Harvest Inspector, Forest Service Representative (FSR)
Soil Productivity & Water Quality	Are the Best Management Practices and applicable Forest Plan standards effective in meeting soil productivity and water quality standards?	During operational periods and within 6 months to 1 year after operations end.	Field evaluation of the effectiveness of BMPs to meet Forest Plan standards. Random sample of harvest units using line transects & point samples	Field inspection forms, filed in S.O.	Interdisciplinar y Team (Forest personnel in hydrology, soils, timber)
Best Management Practices Implementation – Audit by GFC	Were Best Management Practices implemented per Georgia's Forestry BMP Handbook and effective in protecting water quality?	During operational periods and within 6 months to 1 year after operations end.	Field evaluation of randomly selected harvest units and prescribed burns by Georgia Forestry Commission water quality personnel.	Completion of GFC Best Management Practice Audit Form, filed in state database	Georgia Forestry Commission Water Quality personnel
Revegetation of Disturbed Areas	Were the prescribed revegetation efforts on	Within one growing season of	Field visual evaluation of disturbed areas that have been	Field visual inspection of random sample	Timber Sale Administrator,

Resource Assessed	Monitoring Question/Objecti ve	Frequency	Field Method/Data Collection	Documentatio n Format	Primary Responsibilit Y
	disturbed sites such as skid trails, landings, skid trails, and firelines implemented and effective in establishing ground cover and erosion protection?	revegetation operations.	revegetated to assess that sites have been seeded and rehabilitated to ensure revegetation is successful.	of revegetated areas.	Wildlife Biologist
Non-Native Invasive Plants	Are NNIS populations present within harvest units?	During timber sale layout, prior to harvest	Field inventory and mapping of NNIS populations during the timber sale layout process.	Inventoried populations will be mapped using GPS and filed at the District	District Silviculturist, District Wildlife Biologist
Non-Native Invasive Plants	Are timber sale contract provisions to limit the spread of NNIS plants effective?	1-2 field seasons after harvest activities have been completed	Field inspections to identify establishment or spread of NNIS	Inspection report of findings	District Silviculturist, District Wildlife Biologist
Rare Plants	Are rare plant protections adequate to protect populations?	During timber sale layout, operational periods, and 1-2 field seasons after harvest	Field inspection of known rare plant populations.	Inspection report of findings	Timber Sale Administrator, District Wildlife Biologist
Timber	Are timber harvest activities adhering to applicable Forest Plan standards?	Throughout the life of the timber sale contract	Field inspections through all phases of harvesting to ensure contract provisions are being met and	Timber Sale inspection reports	Harvest Inspector, Timber Sale Administrator, Forest Service Representative , District

Resource Assessed	Monitoring Question/Objecti ve	Frequency	Field Method/Data Collection	Documentatio n Format	Primary Responsibilit Y
			implemented in compliance with the Forest Plan.		Wildlife Biologist
Wildlife	Are key successional stages provided?	1-2 field seasons after harvest activities have been completed	Breeding bird/drumming grouse surveys	R8 Bird Database, inspection report of findings	District Wildlife Biologist, partners
Reforestation	Are harvested stands regenerated and restocked within five years of harvest?	One and three years after planting trees, and at 5 years or later after site preparation has been completed with natural regeneration	Field evaluation of representative sample plots and/or field inspection will be used to determine stocking, composition and condition of regeneration.	Report documented in District FACTS database	District Silviculturist
Heritage	Are Forest Plan standards effective in protecting cultural and heritage resources?	During and immediately after harvest activities	Field inspections of sites to ensure the protection or avoidance of heritage resources.	Inspection report of findings	Timber Sale Administrator, Archeologist, District Ranger

5)			
	ş		